

## EAST Search History

| Ref # | Hits   | Search Query                                                                                                        | DBs                          | Default Operator | Plurals | Time Stamp       |
|-------|--------|---------------------------------------------------------------------------------------------------------------------|------------------------------|------------------|---------|------------------|
| L2    | 15     | (torres-pedro keppner-herbert fischer-diego).in.                                                                    | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:52 |
| L3    | 857    | 136/251.ccls.                                                                                                       | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:52 |
| L4    | 0      | 136/143.ccls.                                                                                                       | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:52 |
| L5    | 143    | 136/243.ccls.                                                                                                       | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:52 |
| L6    | 1561   | 136/256.ccls.                                                                                                       | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:53 |
| L7    | 1307   | 136/244.ccls.                                                                                                       | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:53 |
| L8    | 368796 | (conical cone recess slit pyramidal spherical) with (bottom base)                                                   | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:54 |
| L9    | 6759   | ((conical cone recess slit pyramidal spherical) near (bottom base)) and (wire electrode) and (solder\$5 weld\$5)    | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 13:00 |
| L10   | 409    | l9 and (metal near contact)                                                                                         | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:55 |
| L11   | 2520   | ((conical cone recess slit pyramidal spherical) near (bottom base)) and ((wire electrode) with (solder\$5 weld\$5)) | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:58 |
| L12   | 195    | l11 and (metal near contact)                                                                                        | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 12:58 |
| L13   | 1547   | ((conical cone) near (bottom base)) and (wire electrode) and (solder\$5 weld\$5)                                    | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 13:00 |
| L14   | 95     | l13 and (metal\$3 near contact)                                                                                     | US-PGPUB;<br>USPAT;<br>USOCR | OR               | ON      | 2007/05/10 13:01 |
| S1    | 0      | "sealed solar cell" and "contact hole"                                                                              | USPAT                        | OR               | OFF     | 2006/09/21 17:31 |
| S2    | 0      | "sealed solar cell" and "contact portion"                                                                           | USPAT                        | OR               | OFF     | 2006/09/21 17:31 |

## EAST Search History

|     |      |                                                              |                              |     |     |                  |
|-----|------|--------------------------------------------------------------|------------------------------|-----|-----|------------------|
| S3  | 16   | "sealed solar cell"                                          | USPAT                        | OR  | OFF | 2006/09/21 17:33 |
| S4  | 112  | "contact point" and "solar cell"                             | USPAT                        | OR  | OFF | 2006/09/21 17:34 |
| S5  | 636  | (136/251).CCLS.                                              | USPAT;<br>USOCR              | OR  | OFF | 2006/09/22 09:23 |
| S6  | 0    | (135/244).CCLS.                                              | USPAT;<br>USOCR              | OR  | OFF | 2006/09/25 07:13 |
| S7  | 942  | (136/244).CCLS.                                              | USPAT;<br>USOCR              | OR  | OFF | 2006/09/25 09:16 |
| S8  | 0    | 136/244.ccls. and "blind hole" and "after lamination"        | USPAT                        | OR  | OFF | 2006/09/25 07:16 |
| S9  | 0    | "solar cell" and "blind hole" and "after lamination"         | USPAT                        | OR  | OFF | 2006/09/25 07:17 |
| S10 | 9    | "solar cell" and "blind hole"                                | USPAT                        | OR  | OFF | 2006/09/25 08:49 |
| S11 | 9    | "solar cell" and "blind hole"                                | USPAT                        | AND | OFF | 2006/09/25 07:28 |
| S12 | 183  | "solar cell fabrication"                                     | USPAT                        | AND | OFF | 2006/09/25 08:22 |
| S13 | 4947 | torres                                                       | USPAT                        | AND | OFF | 2006/09/25 08:10 |
| S14 | 19   | pedro torres                                                 | USPAT                        | AND | OFF | 2006/09/25 08:13 |
| S15 | 630  | torres.inv.                                                  | USPAT                        | AND | OFF | 2006/09/25 08:13 |
| S16 | 0    | yorres-pedro.in.                                             | USPAT                        | AND | OFF | 2006/09/25 08:13 |
| S17 | 2    | torres-pedro.in.                                             | USPAT                        | AND | OFF | 2006/09/25 09:16 |
| S18 | 2    | fischer-diego.in.                                            | USPAT                        | AND | OFF | 2006/09/25 08:15 |
| S19 | 0    | "blind hole" and S12                                         | USPAT                        | AND | OFF | 2006/09/25 08:23 |
| S20 | 0    | "process of fabrication solar cell"                          | USPAT                        | AND | OFF | 2006/09/25 08:24 |
| S21 | 28   | "solar cell fabrication process"                             | USPAT                        | AND | OFF | 2006/09/25 08:46 |
| S22 | 17   | "photovoltaic" and "blind hole"                              | USPAT                        | OR  | OFF | 2006/09/25 08:49 |
| S23 | 1    | S7 and "blind hole"                                          | USPAT                        | OR  | OFF | 2006/09/25 09:04 |
| S24 | 1    | S7 and "blind hole"                                          | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2006/09/25 09:05 |
| S25 | 6    | S7 and blind hole\$1                                         | US-PGPUB;<br>USPAT;<br>USOCR | AND | ON  | 2006/09/25 09:07 |
| S26 | 31   | ("136"/\$.ccls. and (blind\$1 adj hole\$1))                  | US-PGPUB;<br>USPAT;<br>USOCR | AND | ON  | 2006/09/25 09:08 |
| S27 | 11   | ("0894216"   "2976340"   "3269875").PN. OR ("4204882").URPN. | US-PGPUB;<br>USPAT;<br>USOCR | OR  | OFF | 2006/09/25 09:09 |
| S28 | 5    | torres-pedro.in.                                             | US-PGPUB;<br>USPAT;<br>USOCR | AND | OFF | 2006/09/25 09:16 |
| S29 | 295  | (136/244).CCLS.                                              | US-PGPUB                     | OR  | OFF | 2006/09/25 09:17 |

## EAST Search History

|     |          |                                        |                              |    |     |                  |
|-----|----------|----------------------------------------|------------------------------|----|-----|------------------|
| S30 | 1237     | 136/244.ccls.                          | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 09:18 |
| S31 | 295      | S30 not S7                             | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 10:23 |
| S32 | 12865072 | S30 not S7 pd<"20021018"               | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 10:25 |
| S33 | 12865072 | (S30 not S7) pd<"20021018"             | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 10:26 |
| S34 | 4817     | "136"/\$.ccls. and (solar adj cell\$1) | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 10:28 |
| S35 | 39       | S34 and (blind\$1 and hole\$1)         | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 11:01 |
| S36 | 279      | 136/243                                | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/09/25 11:04 |
| S37 | 1652     | 136/244                                | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/09/25 13:44 |
| S38 | 5307     | "136"/\$ and (hole\$1)                 | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/09/25 13:47 |
| S39 | 63       | S38 and "after lamination"             | US-PGPUB;<br>USPAT;<br>USOCR | OR | ON  | 2006/09/25 13:47 |
| S40 | 979      | Haga.in.                               | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 10:47 |
| S41 | 4590232  | Haga et al.in.                         | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 10:46 |
| S42 | 1        | ("6133521").PN.                        | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:06 |
| S43 | 1        | ("5717255").PN.                        | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:06 |
| S44 | 1533     | 136/256.ccls.                          | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:14 |

## EAST Search History

|     |       |                                                                               |                              |    |     |                  |
|-----|-------|-------------------------------------------------------------------------------|------------------------------|----|-----|------------------|
| S45 | 7     | S44 and ((base adj plate) with metal)                                         | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:21 |
| S46 | 574   | S44 and (substrate with metal)                                                | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:23 |
| S47 | 445   | S44 and (substrate with metal)                                                | USPAT;<br>USOCR              | OR | OFF | 2006/10/30 11:24 |
| S48 | 208   | S47 and hole                                                                  | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:24 |
| S49 | 107   | S44 and (metal adj (substrate or base))                                       | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:36 |
| S50 | 107   | S49                                                                           | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:25 |
| S51 | 53    | S49 and hole                                                                  | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:32 |
| S52 | 6     | 136/257.ccls. and (metal adj (substrate or base))                             | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:34 |
| S53 | 1     | ("3770565").PN.                                                               | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:35 |
| S54 | 1     | ("4754544").PN.                                                               | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 11:35 |
| S55 | 146   | S44 and (metal adj (substrate or base or plate))                              | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:37 |
| S56 | 6     | S55 and (metal adj (strip or conductor))                                      | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:40 |
| S57 | 0     | S55 and (perforated adj hole)                                                 | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:41 |
| S58 | 74    | S55 and hole                                                                  | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 11:41 |
| S59 | 3     | S58 and metal adj (strip or conductor)                                        | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 12:30 |
| S60 | 763   | "136"/\$.ccls. and (metal adj (base or substrate or plate))                   | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 13:07 |
| S61 | 0     | S60 and (insulator adj between adj metal)                                     | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 12:35 |
| S62 | 82128 | S41 same insulat\$4                                                           | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 13:06 |
| S63 | 302   | "136"/\$.ccls. and ((metal adj (base or substrate or plate)) same insulat\$4) | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 15:05 |

## EAST Search History

|     |         |                                                                                                   |                              |    |     |                  |
|-----|---------|---------------------------------------------------------------------------------------------------|------------------------------|----|-----|------------------|
| S64 | 518     | "136"/\$.ccls. and ((metal adj (base or substrate or plate or layer)) same insulat\$4)            | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 15:04 |
| S65 | 334     | "136"/\$.ccls. and ((back adj cover) or (metal adj (base or substrate or plate)) same insulat\$4) | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 16:22 |
| S66 | 4329517 | Haga et al.in.                                                                                    | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 16:23 |
| S67 | 716     | Haga.in.                                                                                          | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 16:24 |
| S68 | 67      | Haga-Takahiro.in.                                                                                 | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 17:56 |
| S69 | 2       | S68 and semiconductor.ti.                                                                         | USPAT;<br>USOCR              | OR | ON  | 2006/10/30 16:32 |
| S70 | 1       | ("5133810").PN.                                                                                   | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/30 16:32 |
| S71 | 3752    | "136"/\$ and (contact\$4 and (hole or perforate or aperture))                                     | US-PGPUB;<br>USPAT;<br>USOCR | OR | OFF | 2006/10/31 12:23 |
| S72 | 1       | ("6471816").PN.                                                                                   | USPAT;<br>USOCR              | OR | OFF | 2006/11/01 17:55 |
| S73 | 1       | ("6670541").PN.                                                                                   | USPAT;<br>USOCR              | OR | OFF | 2006/11/02 18:26 |